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ABSTRACT

The Cooperative Assessment of Experiential Learning project (CAEL) has developed general principles for assessment of prior experiential learning which can be adapted for local circumstances and individual learning. An overview of the basic principles of good assessment practice, as represented in current CAEL publications, is provided. Procedural guidelines are presented, with reference to fuller discussion in other CAEL reports. An annotated bibliography of 27 CAEL reports is appended. (Author/MV)

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# PRINCIPLES OF GOOD PRACTICE IN ASSESSING EXPERIENTIAL LEARNING

WARREN W. WILLINGHAM

COOPERATIVE ASSESSMENT OF EXPERIENTIAL LEARNING

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#Member of the CAEL Steering Committee and Board of Trustees that took office October 12, 1976.

CAEL is an educational association of 250 institutions of higher education and other educational organizations. It was chartered by the Regents of the State of New York in September, 1976 for the purpose of fostering experiential learning and the valid and reliable assessment of its outcomes.

CAEL (Cooperative Assessment of Experiential Learning) started in March, 1974 as a research and development project involving Educational Testing Service and a group of colleges and universities. Funding was provided initially by the Carnegie Corporation of New York and subsequently by the Ford Foundation, the Lilly Endowment, and the Fund for the Improvement of Postsecondary Education.

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Warren W. Willingham
Educational Testing Service

Cooperative Assessment of Experiential Learning

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# ABOUT THE AUTHOR

Warren Willingham has been the Executive Director of the Cooperative Assessment of Experiential Learning throughout its lifetime. He has also been its senior specialist in educational measurement and the administrator of the field research which resulted in *The CAEL Validation Report,* a reference document providing the foundation for our confidence in the prospects for valid and reliable assessment of experiential learning. In these and other tasks, Warren Willingham has served the CAEL Project with his talents as author, manager, and scholar. The Project has succeeded in its purposes far beyond our initial expectations. In large measure it has done so because of the energetic and competent participation of faculty and administrators of the member institutions and of institutions beyond their number. Many minds have made their contributions. But it is to Warren Willingham, more than to any others, that we are most indebted for the rich, timely, and valuable yield of CAEL. With this publication we complete the publications program of the initial Project. As it comes to a close, to be succeeded by the new CAEL, the Council for the Advancement of Experiential Learning, we take the occasion to thank Warren Willingham and to honor him for his outstanding leadership.

George E. Ayers
Barbara A. Barbato
Sheila C. Gordon
Morris T. Keeton
Jules O. Pagano
David H. Provost
Peter Smith

**The Executive Committee**
on behalf of the past and current
members of the CAEL Project Steering
Committee and the CAEL Board of Trustees

# PREFACE

During its first three years, as a research and development project, CAEL carried out several major activities in which a large number of postsecondary institutions collaborated. CAEL's main goal was to develop improved methods of assessing experiential learning at the college level, and considerable progress toward that goal was attained through developmental work in its first year. The second and third years were devoted to improving those assessment methods, validating them through field research, discovering better ways to implement assessment programs, and carrying out faculty development programs. This work generated a large number of reports; some were intended for limited distribution, others were revised in the course of the project. The 27 CAEL reports currently available in 1977 are annotated in the Appendix. Number 10, a project summary report, provides a general overview of all major activities.

The intention of the CAEL project was not to produce standardized assessment techniques or tests but to develop general guidelines and principles that could be adapted to local circumstances and to individual learning. The first 26 CAEL reports explicate, through discussion and examples, the sound principles and useful guidelines that gained consensus during the project and tended to be supported by research and experience. The purpose of this report (the 27th) is to summarize in succinct outline form what CAEL has come to view as sound procedures in the assessment of experiential learning. By providing a distillation of CAEL findings with appropriate references to fuller discussion, CAEL hopes to facilitate use of its work and to foster improved practices.

Throughout this text, the reader is frequently referred to CAEL-1 through CAEL-26—the numerical listing of reports in the Appendix. The principles presented here are drawn only from these 26 reports—not because they are the only useful source of principles, but because this document is intended primarily to summarize CAEL work. Many of the principles have been stated in somewhat different contexts in different CAEL reports. This document attempts to remain faithful to the intent and often the language of the earlier reports, but in citing those documents for reference there has been no attempt to refer to every instance where principles may have been mentioned or discussed. Appreciation is expressed to the many authors of the 26 CAEL reports from which these principles are drawn.

Special appreciation is also expressed to those individuals who were directly helpful in the preparation of this report. Sheila Gordon, Morris Keeton, and Joan Knapp critiqued an early draft; Jane Porter Stutz edited a later version. The manuscript was also reviewed by the CAEL Executive Committee in order to insure that the report is generally consistent with the spirit of CAEL's work and adequately reflects its concerns for quality education. I am grateful for the many helpful suggestions of these respected colleagues, but must bear responsibility for shortcomings that remain. I also wish to thank Linda Cokos for her very competent assistance in the course of this work.

Finally, on behalf of the CAEL Steering Committee and Educational Testing Service, I would again express gratitude to the Carnegie Corporation of New York for providing initial support for this important work and to the Ford Foundation, the Lilly Endowment, and the Fund for the Improvement of Postsecondary Education for providing additional support for CAEL.

Warren W. Willingham
CAEL Project Director

May 1, 1977

# INTRODUCTION

This brief introduction provides some important background concerning CAEL's view of its work and the nature of the problems it has addressed. The issues outlined here help in understanding the character of the principles included in this report and why the project has followed the course it has.

## The Nature of the Assessment Problem

The problem of assessing experiential learning is much dependent upon the nature of that learning. While CAEL focused upon certain types of learning, frequently in non-classroom locations, it is important to observe first that all learning is in some real sense experiential. Furthermore, CAEL holds that all learning in order to be most effective should have both an experiential and a theoretic component.

Classrooms are experiential settings. A critical aspect of the improvement of classroom instruction is the enrichment of the variety and significance of direct and vicarious experiences of the phenomenon under study. This is recognized by the fact that experiential learning and its assessment often receive emphasis in traditional classrooms through special projects, research, laboratory exercises, and so on. Classroom learning tends, however, to place more emphasis on the theoretic component partly from habit and partly because of the inherent limitations in the types of experience that can be usefully mediated in the school or college setting. A more positive reason for theoretic emphasis in the classroom is the efficiency and power of verbal and mathematical symbols in organizing learning and generalizing its application to other situations.

The label "experiential learning" is not meant to suggest that classroom learning cannot or should not have a substantial experiential component. It is rather that CAEL's emphasis has not been upon classroom mediated learning or upon learning where the primary emphasis is upon symbols. The project has emphasized assessment of learning in situations in which the priority is rather upon observing, interacting, performing, making things happen, feeling the effects of these activities, noting responses of others, etc. It is also important to note that CAEL's emphasis upon college-level learning reflects the scope of the project and is not intended to imply that experiential learning is important only at the college level. Indeed, it is CAEL's impression that many of the principles outlined here apply especially well to experiential learning programs in secondary schools.

CAEL has devoted major attention to the assessment of two large classes of learning: that which is sponsored by the institution and typically off-campus, and that which is not sponsored by the institution and typically occurs prior to matriculation. There are numerous varieties of sponsored learning including internships, cooperative work study, field experience, study abroad, community service, and so on. The variety of prior learning is even more diverse and may include virtually any type of college-level learning that is relevant to the degree objective of the student and the mission of the institution.

These two types of learning are motivated by somewhat different educational objectives. Sponsored learning is intended to strengthen a student's program by

complementing theoretic with experiential learning. Crediting prior learning is intended rather to recognize what parts of an academic degree the student has already mastered and to start her or him at an appropriate point in the curriculum (see expecially CAEL–3, –5, and –9 for discussion of the rationale of both types of learning*). On the other hand, sponsored and prior experiential learning are basically quite similar and there has been marked interest in both in recent years. A widespread view that improved assessment techniques are critical to effective and responsible increased use of both types of experiential learning led to the CAEL effort (see CAEL–10 for discussion of the background of CAEL). Several aspects of experiential learning are particularly important in appreciating the character of the assessment problem and why it poses special difficulties and requirements. The following are worth special note.

- Experiential learning is often quite diverse and highly individualized. In some instances this variability is simply a reflection of the learning experiences of the student. In other instances a high degree of individualization is intentional in order to maximize the salience and usefulness of the learning.
- Supervision of experiential learning varies. The learning may be totally independent; it may have been supervised under non-institutional auspices; or it may be closely planned and monitored but under quite different circumstances than most classroom learning.
- The fact that assessment of prior learning comes after the learning has occurred is a particularly significant circumstance that calls for special procedures and safeguards.
- Experiential learning tends to place more responsibility on the student for clarifying learning objectives as well as for pursuing those objectives. Again, this is partly a reflection of the nature of the learning but partly an objective of experiential learning to help students learn how to assume such responsibility.
- As compared to much classroom learning, which tends to emphasize abstract and conceptual elements, experiential learning places more emphasis upon application of knowledge. Its demonstration, therefore, is apt to require appropriate evidence of capability, performance, or a satisfactory learning product.

These various characteristics differ somewhat in their applicability to experiential learning, but on the whole they have an obvious and important bearing on the assessment problem that is reflected in the assessment principles and practices described in the following sections. In particular, these aspects of experiential learning often call for assessment procedures that emphasize expert judgment. So even while recognizing that objective examinations are frequently an appropriate means of assessment, CAEL chose to focus its energies on alternate types of assessment emphasizing expert judgment because such assessment is so often most relevant and also much in need of further development. That choice of priorities is clearly reflected in CAEL work.

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*CAEL numbers cited throughout the text refer to CAEL reports annotated in the Appendix.

## The Functions of Assessment

On what basis should one attempt to define "good practice" in assessing experiential learning? In answering that question perhaps the most appropriate place to start is with the basic functions assessment is intended to serve. There are many different types of educational and psychological assessment, and they serve a variety of functions. Three are especially pertinent to the assessment of experiential learning: the certifying function, the educative function, and the evaluative function. Effective assessment procedures should serve well each of these functions.

The certifying function of assessment is to establish and recognize what the student knows and to justify credentials awarded. Direct assessment of student learning can be a powerful agent in promoting educational flexibility because it provides a mechanism for recognizing learning independent of the circumstances under which it was acquired; thus, assessment is used to recognize learning regardless of whether or not the individual has been schooled. Furthermore, assessment has the important advantage of giving recognition to specific capabilities and competences rather than simply verifying enrollment or experience. The academic credit hour is useful for educational accounting and marking student progress, but the credit system is widely criticized because it resists educational reform and places too much emphasis upon the time-serving character of the college degree.

If assessment practices are to serve the certifying function well, the results of assessment must be equitable to students, procedures must be educationally sound, and assessment methods must meet acceptable measurement standards of validity and reliability. All of these considerations deal basically with the question of whether assessment is dependable and defensible.

The educative function of assessment is a second important consideration. A principal objective of experiential learning is to facilitate personal development of students, and assessment should contribute directly to that process. This means especially helping the individual achieve a better understanding of her- or himself especially in relation to the individual's own interests and aspirations and in relation to external expectations and requirements associated with the individual's goals. Assessment facilitates personal development not when it makes comparisons among individuals that may be punitive but when it helps students perceive and work toward their educational and personal objectives. Thus, it is especially important to embed assessment in the conception and execution of educational programs and to actively involve the student in the assessment process. These intentions were well expressed by the following statement adopted by the CAEL Steering Committee at its first meeting in March 1974.

> "The priorities for the processes, methods, and criteria used for assessing and crediting the outcomes of prior and ongoing learning should conform to the following propositions:
>
> a. Learning occurs within formal educational settings and in the community at large.
> b. Each individual has different needs, prior experiences, and objectives.
> c. Individual learning and aspirations should be fostered.
> d. Individual acceptance of responsibility for learning should be reinforced.

e. Criteria for assessment should rest upon individual goals or upon institutional or external requirements, or upon both, as appropriate.

f. The array of processes, methods, and criteria used for assessment should meet the needs of persons not now being served.

g. The results of assessment should give substantive information about the knowledge, competence, attitudes, values, and other dimensions of personal development which the individual has demonstrated in relation to his or her goals."

The evaluative function of assessment is a third important consideration in determining the nature of good assessment practice. Systematic assessment serves as a primary means of feedback to the educational system for program renewal and quality assurance. Adequate assessment requires that objectives be stated and that outcomes be specified. Thus, a major function of assessment should be to determine whether learning activities are appropriate, whether instruction is adequate, and whether the educational program serves its intended purpose.

Assessment itself should be neutral, but adequate means of assessment has a special relevance to the quality and credibility of nontraditional educational programs. Hefferlin* cites a number of standards used by crediting associations to evaluate conventional programs and argues that those standards have little relevance to nontraditional education, especially experiential learning off campus (e.g., residency requirements, student/faculty ratios, library space). Such conventional measures are almost always input variables or indicators of process, neither of which has necessarily much to do with the quality of the learning that takes place. But in the absence of such indicators, there is all the more need for sound assessment to demonstrate that students have achieved acceptable standards and that the program deserves full recognition for its educational quality.

CAEL recognized the importance of this evaluation function (see CAEL-9, Chapter 10), but it made an early decision to confine its initial work to the assessment of student learning and not to deal directly with program evaluation. Thus, CAEL's work has important implications for quality assurance not because CAEL has attempted to set any standard for the operation or evaluation of programs, but rather because adequate definition and assessment of learning is a keystone in any sound educational program. It is assumed that institutions set their own standards for awarding credit; this document is concerned with the process and the questions that are useful to address. CAEL's early decision not to involve itself in program evaluation does impose, however, an important limitation on the scope of the principles and practices discussed here.

## The Nature of These Principles

The emphasis in this document is upon the assessment process and those administrative issues directly related to assessment—not upon issues of educational philosophy, curriculum, and credentials addressed in other CAEL reports, and not upon specific program components such as credit policies, pricing practices, resi-

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*Hefferlin, JB Lon. Avoiding cut-rate credits and discount degrees, in K. Patricia Cross, John R.Valley, and Associates, *Planning non-traditional programs: An analysis of the issues for postsecondary education*. San Francisco: Jossey-Bass, 1974, pp. 148–174.

dency requirements, etc. The emphasis here is also upon general principles, not particular substantive questions or thorny issues such as whether to credit foreign language facility of students raised in another culture or what types of learning are and are not appropriate in meeting general educational requirements. There is certainly need for dialogue on many such substantive issues, but that lies beyond the scope of this report.

Furthermore, this document attempts to identify general needs concerning sound assessment and does not attempt to offer prescriptions. The principles suggested here differ considerably in their importance, and many apply selectively depending upon local circumstances, the nature of the learning involved, and so on. Institutions obviously must make their own judgments regarding good practices, and this report is intended simply to facilitate that process. It is only assumed that institutions have three essential obligations in assessing and crediting experiential learning:

- to develop a sensible rationale for the experiential learning that is consistent with the institution's mission, reasonable in relation to its resources, and useful to its intended clientele;
- to translate that rationale into workable policies, guidelines, and operating procedures that are made clearly known to all students and interested parties; and
- to insure that those policies, guidelines, and procedures are followed with reasonable fairness and consistency and useful outcome.

In interpreting this summary of CAEL work, it is useful to recognize other interpretations of "good practice." First, there is the substantial educational literature concerning good practice in classroom teaching, testing, and grading. A second interpretation of good practice refers to the very large psychometric literature concerned especially with the theory and technology of educational measurement. In the latter case there are formal and detailed standards of accepted professional practice. CAEL has been very much aware of both of those important lines of work and regards its own activities as parallel and supplementary.* Principles and practices described here are certainly not radically different from what has elsewhere been considered desirable. CAEL's intention has been to take a step forward in adapting good assessment practices to the particular circumstances and problems posed by experiential learning.

A third interpretation of good practice refers to accreditation standards including the public interest and consumer concerns that those standards represent. This interpretation of good practice relates especially to institutional practices regarding the promotion, pricing, and warranty of quality for experiential programs. CAEL does not consider itself in any sense responsible for programs of its member institutions or for other matters connected with accreditation principles or activities, but it has been very much concerned about such issues and does seek opportunities to serve as a resource and assist agencies and institutions in whatever

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*For an introduction to the literature of exemplary classroom practices, see especially: McKeachie, Wilbert J. *Teaching tips: A guidebook for the beginning college teacher.* Lexington, Massachusetts: D.C. Heath, 1969; and, Milton, Ohmer and Edgerly, John W. *Testing and grading of students.* New York: Change Magazine/Educational Change, 1976. For psychometric standards see: American Psychological Association. *Standards for educational and psychological tests.* Washington, D.C.: APA, 1974.

ways seem appropriate. In that sense, CAEL practices outlined here may contribute to useful dialogue concerning accreditation standards and consumer protection.

A few observations are in order concerning the structure of the main body of this report. Sections I through VI concern six steps in assessment; Sections VII through XI concern administrative aspects of assessment. From its inception CAEL has followed the practice of outlining general procedures and suggesting variations on those procedures and other ways in which general principles and practices can be adapted to local circumstances and the particular character of the learning involved.

For that purpose, CAEL has frequently referred to six steps in assessment as an organizing frame of reference. The six steps correspond to Sections I through VI; they are illustrated in Figure 1 with an important qualification. That is, the figure

**Figure 1.**
**Six Basic Steps in Assessing Experiential Learning—Their Order and Application to Prior and Sponsored Learning**

| Step | Prior Learning | Sponsored Learning |
|---|---|---|
| IDENTIFY | 1. Identify college-level learning acquired through life experience | 2. Set specific learning objectives that fit the goals and the learning site |
| ARTICULATE | 2. Show how and what parts of that learning are related to the degree objective | 1. Decide on general learning goals that are related to the degree objective |
| DOCUMENT | 3. Verify or provide evidence of learning | 4. Maintain an integrated record as evidence of learning |
| MEASURE | 4. Determine the extent and character of learning acquired | 5. Determine whether learning meets the criterion standard previously set |
| EVALUATE | 5. Decide whether the learning meets an acceptable standard and determine its credit equivalence | 3. Determine the appropriate criterion standard required for credit |
| TRANSCRIBE | 6. Record the credit or recognition of learning | 6. Record the credit or recognition of learning |

illustrates that the same steps apply equally well in the case of sponsored and prior learning, but there is a slightly different emphasis in the two cases and, more important, the order of the steps varies.

The point has been made elsewhere (see CAEL–9, Chapter 13) that these six steps represent fundamental issues and operations in educational measurement, and that they have their corollary in the development of standardized examinations though the techniques and circumstances seem, on the surface, to be quite different. Similarly, there are apparent differences in the assessment of prior versus sponsored learning—not differences in underlying theory but differences in the way one goes about the assessment. The critical distinction between prior and sponsored learning lies in the fact that in one case the learning has occurred prior to any consideration of assessment and in the other case it has not. That important distinction is reflected in the steps indicated under prior and sponsored learning in Figure 1 and should be borne in mind when reading Sections I through VI.

The difference as to when learning occurs in prior and sponsored learning has two main effects on the character of assessment. One is a reversal in the sequence of "identify learning" and "articulate learning." In most educational activities one considers first general goals and then particular learning that will further those goals; with prior learning the order is necessarily reversed. The second important timing difference concerns when appropriate standards are decided upon. In a sponsored program it is usually desirable to clarify standards for acceptable learning outcomes before the learning is undertaken, but in the case of prior learning the selection of an appropriate standard of performance would normally come after the nature and extent of the learning were determined. (In some colleges prior learning is evaluated against institutional competence statements, suggesting even a third possible order of steps which need not be pursued here.)

Finally, how is this document best used? Various possibilities can be suggested:

- as an enumeration of items to consider in designing and implementing a new program of experiential learning,
- as an aid in reviewing and possibly improving an existing experiential program,
- as a source of suggestions for possible ways to improve assessment in the traditional classroom,
- as a means of bringing important issues to the attention of faculty who may be inexperienced in experiential learning and its assessment,
- as a possible framework for informing interested third parties concerning the institution's assessment policies and practices.

In considering such possible uses of this report, it is very necessary to bear in mind the obvious fact that institutions and their programs vary a great deal. What may be highly significant in insuring a quality program at one institution may be of limited consequence at another because of differences in program objectives or operating procedures. The intention here is to identify needs that deserve careful attention. Thus, the items included are stated only briefly and are often qualified to expose limitations on their possible application. The checklist on the following two pages provides an overview of the sections that follow and may prove to be a convenient reference in using this report.

**Checklist of**
**Principles of Good Practice**
**in Assessing Experiential Learning**

I. Identify Learning
- 1.1 What is college level?
- 1.2 Describe experience
- 1.3 Describe learning
- 1.4 Specify outcomes
- 1.5 Recency of learning
- 1.6 Value to student
- 1.7 Facilitate reentry
- 1.8 Prepare for learning

II. Articulate Learning
- 2.1 What is creditable?
- 2.2 Mix theoretic and experiential
- 2.3 Relate to degree
- 2.4 Sponsored program guidelines
- 2.5 Student learning goals

III. Document Learning
- 3.1 Clarify policy
- 3.2 Specify appropriate documentation
- 3.3 Distinguish types of evidence
- 3.4 Authenticate evidence
- 3.5 Documenting letters
- 3.6 Quality not quantity

IV. Measure Learning
- 4.1 Fit method to learning
- 4.2 Fit method to learner
- 4.3 Assessment as learning
- 4.4 Insure reliability
- 4.5 Insure validity
- 4.6 Good assessment procedure
- 4.7 State results objectively
- 4.8 Self-assessment

V. Evaluate Learning
- 5.1 Whose standards?
- 5.2 What standard?
- 5.3 Criterion standards
- 5.4 Equitable standards
- 5.5 Specify credit policies
- 5.6 Learning contracts
- 5.7 Useful feedback
- 5.8 Useful integration

**Checklist of**
**Principles of Good Practice**
**in Assessing Experiential Learning**
***(continued)***

VI. Transcribe Learning
- 6.1 Record learning appropriately
- 6.2 Describe content and level
- 6.3 Communicate with third parties
- 6.4 Specify procedures

VII. Policy and Procedure
- 7.1 Articulate rationale
- 7.2 Clarify degree requirements
- 7.3 Review policy
- 7.4 Clarify program operation
- 7.5 Adapt to students
- 7.6 Protect privacy

VIII. Guidelines
- 8.1 Faculty handbook
- 8.2 Student brochure
- 8.3 Student materials
- 8.4 Assessment sequence
- 8.5 Assessment techniques

IX. Assessors
- 9.1 Assessor vs. resource person
- 9.2 Choice of assessors
- 9.3 Responsibilities and qualifications
- 9.4 Training requirements
- 9.5 Learner as assessor

X. Cost of Assessment
- 10.1 Insure cost effectiveness
- 10.2 Assessment as instruction
- 10.3 Value to consumer
- 10.4 Cost efficiency

XI. Quality Assurance
- 11.1 Foster professional standards
- 11.2 Agreement on practices
- 11.3 Monitor authenticity
- 11.4 Monitor consistency in assessment
- 11.5 Appropriate technical procedures
- 11.6 Monitor value to students
- 11.7 Program evaluation

# PART A
# STEPS IN ASSESSMENT

# I. IDENTIFY LEARNING

An important step in assessment is to identify the types of learning or competences acquired through life experience or those to be emphasized in an institutionally sponsored program of experiential learning. This is a critical stage in the assessment of experiential learning because of the obvious need to know as clearly as possible what competence or knowledge there is to be assessed. It is typically a very difficult but personally valuable step for students seeking credit for learning prior to enrollment; in the case of institutionally sponsored programs, this step serves to direct the learning.

**What is College Level?**

**1.1** Only college-level learning should be credited by colleges or universities. The institution should provide clear guidelines (including principles and examples) as to what it considers college-level learning.

[*Comment*: Three characteristics are often considered important: (a) that the learning imply a conceptual as well as a practical grasp of the knowledge or competence acquired, (b) that the learning be applicable outside the specific context in which it was acquired, and (c) that the learning fall within the domain usually considered degree credit higher education as opposed to secondary or continuing education for non-credit purposes. The essential point is that the guidelines should faithfully reflect institutional policy regarding the domain of college-level learning.]

**1.1.1** Students should have the option of justifying their learning as college level on any basis acceptable to the college.

[*Comment*: Possible bases for justification include the following:

- relating learning to subject areas traditionally taught in colleges.
- showing that what was learned is at a level of achievement equal to what is normal in colleges.
- comparing specific learning to that acquired in college-level work.
- relating learning to a personal goal that requires college-level learning.
- identifying learning as that acquired after high school and expected for professional acceptance.

(Adapted from CAEL-3.)]

**Describe Experience**

**1.2** As an antecedent to identifying learning, it is useful for students to first describe relevant learning experiences.

[*Comment*: In the case of sponsored learning this is largely a matter of anticipating tasks and activities (see CAEL-5 and -6). In the case of prior learning various techniques may be helpful in recalling and recording pertinent experiences, e.g., through use of a time-line, resume, work description, or autobiography. CAEL has focused upon the portfolio as a means of organizing the evidence and petition for prior learning. "Portfolio" is here a generic term that refers both to a product and to a process of assembling pertinent information; it can be defined and used in a variety of ways (see CAEL–3 and –4 for discussion and illustration of alternatives).]

**1.2.1.** Students should be required to differentiate clearly between learning and experience, particularly in seeking credit for learning not directly supervised by faculty.

**Describe Learning**

**1.3** Students should express learning outcomes (anticipated or achieved) in terms appropriate to the institution's curriculum and assessment procedures.

[*Comment*: There is a variety of possibly useful formats, e.g., institutional goals or degree requirements, competences, occupational skills, courses, taxonomies. (See CAEL–3 and –4.)]

**Specify Outcomes**

**1.4** Learning outcomes should be identified with enough specificity that they can be readily communicated and assessed.

[*Comment:* Broad learning goals like communication, analysis, or management are frequently useful in classifying learning outcomes but may not be helpful in making clear what learning was accomplished. To say that a person has learned to communicate may mean many different things at different levels of competence. More specific description of learning is necessary if faculty and student are to know clearly what is to be learned and to recognize when learning has in fact taken place. Ideally, descriptions of learning should also clarify what the student should be competent to do as a result of the learning.]

**1.4.1** Clarity and specificity in describing learning outcomes

should not be achieved at the expense of relegating learning objectives to trivial skills.

**Recency of Learning**

**1.5** For those forms of prior learning most commonly assessed, there should be stated policy with respect to the recency or currency of learning that is expected if credit is to be awarded. Insofar as possible, such policies should avoid inconsistencies with standard practices in transcript evaluation of students transferring or reentering college.

**Value to Student**

**1.6** Identification of learning (either prior learning acquired or sponsored learning intended) should proceed in a manner that reinforces what has been learned, fosters improved self-awareness, enhances self-confidence, and emphasizes the importance of students' assuming responsibility for their own learning.

**Facilitate Reentry**

**1.7** It is highly desirable to provide some specific mechanism for helping the student identify prior learning and for facilitating reentry into higher education.

[*Comment:* Many students petitioning for credit for prior learning will have been absent from formal education for some time and may be unsure of themselves and how to proceed. Furthermore, the process of developing a portfolio of prior learning is uncommonly difficult for many students. With proper support, however, it frequently proves to be an extremely valuable learning experience for the student. Consequently, it is particularly important to provide some formal mechanism for assisting students. Possibilities include counseling, mentoring, workshops, educational planning courses, brokering organizations, self-instructional materials. (See CAEL–3 and –4.)]

**1.7.1** Students should be provided with explanatory materials concerning assessment of prior learning, including examples of portfolios, learning contracts, or other items that may be relevant.

[*Comment*: Brochures for students considering a program are to be distinguished from the detailed information necessary for students participating in a program. (See 8.2 and 8.3.)]

**1.7.2** A formal course is very desirable for orienting students to assessment of prior learning.

[*Comment*: A credit-bearing course has many advantages. It signals serious intent and acknowledges that acquiring expertise in educational planning and assessment is important in the institution's system of values. A course offers a good means for magnifying the educational value of assessment (see CAEL–12 for positive research results on the value of assessment). It also provides an assured vehicle for updating information, monitoring progress, and providing assistance as needed. Furthermore, a formal course offers the added advantage of providing a routine means of accounting some of the cost of assessing prior learning and recognizing the faculty time as a legitimate instructional cost. (See CAEL–3 and CAEL–9, Chapter 12, for discussion.)]

**Prepare for Learning**

**1.8** Prior to initiating a sponsored learning activity, students should develop a learning plan that includes principal tasks or duties to be performed, specific learning objectives, how learning objectives are to be met, and what special preparation may be necessary.

[*Comment*: See CAEL–6 for suggestions as to how students might develop a plan.]

**1.8.1** It is important to assist students in preparing for sponsored learning activities so that their experience is more likely to result in useful learning.

[*Comment*: CAEL–5 discusses important aspects of preparation for field experience learning. Some vehicle such as a tutorial or seminar is useful if not necessary to provide program orientation. Some programs also require preliminary coursework or make a special effort to teach students skills that are useful in various types of field learning situations.]

# II. ARTICULATE LEARNING

The fact that learning is determined to be college level is not ordinarily a sufficient basis for granting college credit. Also, in most instances the validity of a learning experience for credit purposes depends upon a demonstrated relationship to a defined degree. A similar process would be involved if the point of reference were other than a degree. This step is especially critical in planning individualized degree programs and in the design of institutionally sponsored off-campus programs.

**What Is Creditable?**

**2.1** There should be an institutional rationale for crediting particular types of learning or competences to particular degree programs, especially if there is some difference of opinion among postsecondary institutions regarding credibility.

[*Comment*: See CAEL–1 for a good illustration. Chapter 1 of that report discusses some special problems in learning and assessing interpersonal skills and explains why this competence should be an integral part of some curricula. See CAEL–7 for a detailed procedure for determining what particular occupational competences are related to specific educational programs. The important point is that institutional practices should reflect a consistent and valid interpretation of institutional policy regarding mission and curriculum.]

**Mix Theoretic and Experiential**

**2.2** There should be an institutional rationale concerning the most appropriate mix of experiential and theoretic learning, including how and when the two should be included in the student's educational plan.

**Relate to Degree**

**2.3** Institutions should require individuals petitioning for degree credit to specify satisfactorily how prior experiential learning contributes to the individual's degree program.

[*Comment*: It is commonly acknowledged that most people acquire a great deal of useful learning through life experience, but such learning is not necessarily relevant to a college degree. Learning must be creditable within the context of the institution's curriculum. Whenever possible, learning credited should also bear some useful connection with the personal goals of the student, but that requirement is often not met in education generally.]

**2.3.1** In identifying and articulating learning that is related to educational goals, the student should look both backward and forward—backward to integrate relevant past learning and to identify important gaps, and forward to understand useful steps and attainable objectives.

[*Comment*: See CAEL-3 for discussion of methods of articulation, e.g., thematic narrative, degree pacts, learning contracts.]

**Sponsored Program Guidelines**

**2.4** There should be guidelines at an appropriate level of specificity as to what types of learning goals are generally appropriate in a sponsored experiential learning program.

**2.4.1** Care should be taken to identify learning sites at which learning appropriate to goals is a reasonable possibility. Students should have sufficient information to understand the pros and cons of alternate field placements in relation to learning objectives.

**Student Learning Goals**

**2.5** Student and institution should reach a clear understanding as to the general purpose of his or her sponsored learning activity and how the learning is related to degree requirements and the student's educational goals.

**2.5.1** In sponsored programs it is very important to help students understand and choose learning goals that enhance self-awareness and personal development.

[*Comment*: See CAEL-9, Chapter 6, for an extended discussion and review of literature regarding stages of personal development of adults and strategies for self-actualization in relation to individual differences. See CAEL-2 for advice to students regarding strategies for educational planning.]

**2.5.2** Whenever possible provision should be made for formative evaluation of learning progress in sponsored programs. Students should be encouraged to negotiate new learning objectives if their experience so indicates.

# III. DOCUMENT LEARNING

Presentation of adequate evidence of learning is an important step in assessment. Such documentation comes in many forms, and different types of documentation serve different functions and have different characteristics. In institutionally sponsored experiential learning programs, documentation often involves a personal verification from a site supervisor plus learning products and/or a detailed record produced by the student. Documentation of prior learning comes in many varieties: certificates, letters, learning products, etc.

**Clarify Policy**

**3.1** Institutions should formulate a clear policy as to what types of learning require documentation and what function such documentation is intended to serve.

**3.1.1** In the case of prior learning, reliance upon documentation depends upon the extent to which the institution intends to assess learning directly.

[*Comment:* Some institutions lay special stress on accumulating documentation while others prefer to assess directly. It is useful to recognize that documentation may serve several mutually exclusive functions. For example: (a) organizing proper documentation may in itself be a useful learning experience for the student even if it serves no administrative purpose, (b) documentation can be viewed as an accumulation of descriptive information useful in assessment, (c) documentation can be seen largely as a means of third-party evaluation, and (d) documentation can serve as a useful record for either the student or the institution.]

**3.1.2** In the case of sponsored learning, important functions of documentation are self-assessment and formative evaluation of learning progress.

[*Comment*: See CAEL-22 for a description of the "record-reflection log" which is intended to help serve these functions.]

**Specify Appropriate Documentation**

**3.2** There should be clear institutional specifications as to what types of documentation are appropriate for what types of learning.

**3.2.1** Students should be provided with descriptions and examples of different types of documentation, the functions they serve, and how they should be solicited and presented.

[*Comment*: Types of documentation include: (a) verification of accomplishment, e.g., a prize or musical program; (b) testimony regarding competence, e.g., evaluative letters or job performance reports; (c) learning products, e.g., learning logs, essays, work samples, or art objects; (d) certification, e.g., license or rank attained; (e) other direct evidence, e.g., newspaper clipping or test score; (f) descriptions, e.g., syllabi, membership requirements, or job descriptions.]

**3.2.2** Guidelines for documentation should make clear in what ways documentation provided by the student might be used in assessment.

**Distinguish Types of Evidence**

**3.3** Care should be taken in discriminating whether particular documentation describes experience, describes learning, or provides evidence of learning.

[*Comment*: Evidence of learning may be direct in the form of a detailed report or other student product or indirect in the form of evaluative testimony.]

**3.3.1** Descriptions of learning may or may not, depending upon detail, constitute evidence of learning. Ordinarily, documentation of the fact that a student participated in a learning activity should not in itself constitute adequate evidence of learning. Either type of information may well prove useful for direct assessment.

[*Comment*: In some instances documentation that an individual has participated in an activity may constitute adequate evidence of learning. This can occur when participation is contingent upon having mastered certain competences or qualifications. In this case, the screening or testing associated with the activities serves as a surrogate assessment process. For example, entry into certain civil service jobs requires demonstration of particular competences. Similarly, a certificate or award sometimes provides reasonable assurance of specific learning.]

**3.3.2** If certificates or similar documentation are taken as evidence of specific competence, periodic checks should be undertaken to insure that the meaning of the certificate has not changed.

**Authenticate Evidence**

**3.4** Assessors should take all reasonable and necessary steps to insure that evidence of learning is accurate and that the student is in fact responsible for work presented. There should be written guidelines as to what constitutes authentic documentation.

**Documenting Letters**

**3.5** Procedures for obtaining letters to document learning should serve to clarify the nature of the learning and the dependability of the source of evidence.

**3.5.1** The credentials of individuals writing letters in support of student learning should be clear.

[*Comment*: Individuals writing such letters should know the student and have first-hand knowledge of the experiential learning cited. A documentation letter should state the nature of the author's relationship to the student as well as the author's credentials as an expert judge. If appropriate, it should be written on official stationery.]

**3.5.2** In requesting documenting letters, students should make clear to the author whether the letter is to be one of verification or evaluation.

[*Comment*: Letters requesting experts to make recommendations concerning amount of credit appropriate for particular experiential learning will ordinarily be initiated by an assessor.]

**3.5.3** The content of documenting letters should focus upon the duties, responsibilities, and tasks involved in the experiential learning under consideration (the who, what, when, where, why, how long) and upon the level of performance attained.

[*Comment*: In evaluating performance, authors of documenting letters should be asked to give an accurate indication of absolute level of competence and, if possible, to compare the student's performance with

that of individuals in a known reference group. An indication of personal development should be included if appropriate. Documenting letters should not be perceived merely as letters of recommendation or commendation.]

**Quality not Quantity**

**3.6** Excessive documentation, attractively presented, should not compensate for poor performance in assessment or questionable relevance of learning to the degree objective.

# IV. MEASURE LEARNING

This step in assessment involves determining the extent and character of the knowledge or skill acquired. This is the one step of the six that actually involves some form of quantification, though that quantification may involve nothing more than a qualitative judgment like "good" or "satisfactory." Nonetheless, accuracy of judgment is essential since inconsistency from judge to judge or time to time may be unfair to the student or discredit the program.

**Fit Method to Learning**

**4.1** Assessment of experiential learning should employ measurement methods that fit the character of the learning.

[*Comment*: Some learning experiences develop competence in a specific well-established subject area, in which case a standard appraisal technique like an objective test may be appropriate and desirable. Much experiential learning, however, is characterized by different learning outcomes for different individuals. In this case, more holistic methods of expert judgment are required to determine the nature and level of individual learning outcomes. These include product assessment, interviews, oral examinations, simulations, essays, performance assessment, work checklists, etc. Consult CAEL-1, -3, -7, -8, -11 for discussion of these assessment methods.]

**Fit Method to Learner**

**4.2** In measuring an individual's learning, assessors should use technqiues that are appropriate to the background and characteristics of the learner.

[*Comment*: Other things being equal, choice of an assessment method should favor the student's competence and strengths. Wherever possible the student's opinion regarding an appropriate assessment method should be solicited, and in no event should an extraneous handicap (e.g., speech problem or severe shyness) be allowed to invalidate the assessment.]

**Assessment as Learning**

**4.3** Assessment should be, in itself, a useful learning experience for the student.

[*Comment*: Whenever possible the assessment process should be an integral part of the learning process. It is important that assessment goals be reflected in the learning activity and that learners understand the

nature of the assessment process and what function it serves. An appreciation of the purpose of assessment helps to reinforce a sense of the individual's responsibility for her or his own learning and a sense of mutual accountability with the faculty. Improved self-awareness and better understanding of the techniques of self-assessment are important learning outcomes of assessment and can serve the student in later life. Thus, assessment should be perceived partly as instruction and partly as evaluation of learning.]

**Insure Reliability**

**4.4** Institutions should strive to see that assessment is as reliable (consistent) as possible in order to insure fairness to students.

**4.4.1** To improve consistency in assessment judgments, more than one sample of learning should be examined whenever possible and more than one assessor should be used unless evidence indicates that one is sufficient.

[*Comment*: Research indicates that judgments of different assessors can vary considerably and systematically if they have had limited experience or if assessment guidelines are not clear. Serious inequity to students can result. It is advisable, therefore, for institutions to use multiple assessors until experience indicates that learning can be judged with acceptable consistency (i.e., by assessors working independently). (See CAEL–12.)]

**4.4.2** Assessors should strive to avoid any form of bias, discrimination, or unconscious error in judging student performance or work.

[*Comment*: The following are common types of errors (CAEL–8):

- The tendency to rate too liberally or too severely.
- The tendency to avoid the extremes of the scale and to rate at the average.
- Allowing an outstanding or inferior trait or aspect of performance to influence the rating of other factors (halo effect).
- Judging the ratee according to a personal stereotype or strongly held attitude.
- The tendency to prejudge the ratee by an initial

impression rather than on the basis of observed performance.

- The tendency to rate a student more favorably if the student is similar to the rater in background, attitudes, or ethnic group.
- The tendency to rate a student lower than average if the previous ratee was outstanding or to rate a student higher than average if the previous ratee was poor (contrast effect).]

**Insure Validity**

**4.5** It is essential to insure that assessment is valid, i.e., that assessors measure what is intended.

[*Comment*: Validity of assessment will be improved if there are institutional guidelines as to what constitutes college-level learning, what learning is creditable to particular degrees, what the established objectives of experiential learning programs are, and what specific learning goals students may have contracted for. It is important for institutions not only to describe learning that is creditable under various circumstances, but to provide assessors (and students, where possible) with illustrations—examples of creditable learning and also examples of learning not creditable and the reasons why. Similarly, assessment procedures that involve ratings of products or performance should include examples of learning at different levels of competence, clearly designated (see CAEL–8 for suggested procedures).]

**4.5.1** Whenever possible, it is highly desirable to assess learning by direct comparison with learning objectives or criterion standards previously stated in clear language so that it is possible to decide whether the learning has or has not been acquired.

[*Comment*: This principle is not meant to discourage student initiative in proposing and defining standards or to preclude recognition of unexpected learning outcomes.]

**4.5.2.** Whenever appropriate, assessors should seek different forms of evidence of learning and use more than one type of assessment in order to reach a valid judgment.

[*Comment*: If, for example, a student seeks credit for an unusual set of accomplishments or a variety of specialized work competences, it may be necessary to

obtain (a) detailed information concerning the character of the achievement and testimony as to the accuracy of the claim, and (b) an expert assessment from another source as to the depth of such learning and an appropriate basis for determining credit equivalence.]

**4.5.3** Even though assessors may agree in assessing a particular type of learning, special caution is suggested if they do not agree on how such learning is related to the curriculum.

[*Comment*: CAEL research revealed such results in some instances of assessing occupational competences and interpersonal skills. The danger in such circumstances is that the assessment is invalid because the assessors are agreeing on some superficial aspect of performance without a clear understanding of its educational meaning or value. See CAEL–10, Chapter 4, for data and discussion.]

**Good Assessment Procedure**

**4.6** Proper safeguards should be employed to insure that assessment is well-designed and competently administered.

**4.6.1** All assessment should be carefully planned. Detailed written procedures, instructions, and background material should be available to faculty concerning any assessment procedure routinely used.

[*Comment*: Several CAEL reports contain extensive discussion and suggestions regarding the practical aspects of carrying out different types of assessment. Note especially CAEL–1 on interpersonal competence, CAEL–3 on the portfolio, CAEL–7 on occupational competences, and Chapters 3 through 6 of CAEL–8 on different types of expert judgment.]

**4.6.2** Due to its flexibility in dealing with highly individual learning, the assessment interview is probably the most common method of assessing experiential learning. If the interview is to yield reliable and valid assessment, it is particularly important that it be carefully planned and carried out.

[*Comment*: See CAEL–1, Chapter 7, and CAEL–8, Chapter 3, for detailed discussion and suggested ways to structure and conduct an assessment interview.]

**4.6.3** Specialized assessment techniques such as role-playing or simulation should not be promoted for use unless there are assessors readily available who are sufficiently familiar with such methods to use them with confidence.

**4.6.4** Reasonably standard conditions and arrangements for assessment should be maintained in accord with institutional guidelines unless the nature of the assessment problem suggests otherwise, in which case deviations in procedures should be clarified and agreed to beforehand.

[*Comment*: While it is important to fit the assessment to the learning and to the student, assessors should not be encouraged to disregard guidelines that have been carefully drawn to insure fair assessment. Furthermore, certain arrangements (location and length of an assessment session, the people involved, etc.) may appear especially important to students, and unexplained deviation could be cause for concern and a poor assessment.]

**State Results Objectively**

**4.7** Insofar as possible, the results of individual assessment should be objectively stated.

[*Comment*: Even though the assessment process may emphasize a subjective, holistic judgment, the outcome of the assessment should be as explicit as possible in identifying what specific learning outcomes were involved, what levels of competence were reached, and what standards were employed. Objectivity not only fosters accurate assessment and minimizes misinterpretation, it also facilitates quality control of the assessment process itself by making it possible to compare assessments and to determine how they were reached.]

**Self-Assessment**

**4.8** Self-assessment is often very desirable as a means of enhancing personal development and awareness of the implications of acquired skills. This is especially true in the case of sponsored programs in which students have given special attention to defining their learning objectives.

**4.8.1** Self-assessment is ordinarily not a sufficient basis upon which to grant credit. To the extent that an institution relies upon self-assessment, special care must be taken to define learning objectives clearly and to assemble evidence that objectives have been achieved.

[*Comment*: A few institutions place considerable stress upon self-assessment for pedagogical reasons and are willing to place heavy reliance on the student's judgment as to whether learning objectives have been met. When self-assessment is properly used, it is supplemented with appropriate steps to educate the student on how to assume responsibility for her or his education. (See CAEL–17 and –21.)]

# V. EVALUATE LEARNING

Evaluating learning involves determining whether the knowledge or skill meets an acceptable standard and, in turn, how much credit might be awarded. In the case of prior learning , an appropriate standard is selected after determining the character of the learning. In the case of sponsored learning, the standard of acceptable performance is best determined earlier, before the student undertakes the learning. In either case unambiguous statement of standards is a critical issue since students need clear learning goals and a basis for understanding their educational progress, and third parties need clear evidence of learning in order to maintain credibility of programs.

**Whose Standards?**

**5.1** Individual institutions decide how standards are to be set. Standards may be defined on the basis of institutional program objectives, the objectives of students, or the requirements of third parties (occupational or educational). It is normally desirable to take all three into account, and institutional policy concerning standard setting authority should be clear.

**5.1.1** In defining standards it is desirable to involve, as appropriate, representatives of all parties frequently connected with the learning and its assessment as well as third parties who have an interest in the learning outcomes.

**What Standard?**

**5.2** In evaluating any learning plan or petition for credit, it should be established as early as practical what general type of standard will be used as a basis for awarding credit.

[*Comment*: A sponsored learning program may have established objectives and standards that apply to all participants or performance standards may be individualized, but in either event, they are ordinarily stated as learning objectives. In the case of prior learning standards for awarding credit or recognition may, depending upon the nature of the learning and the institution, be based upon existing competence statements, corresponding course content, degree requirements, or other means of judging the relevance and quality of learning.]

**Criterion Standards**

**5.3** Whenever possible, it is highly desirable to assess learning with reference to criterion standards of what the individual should be able to do.

[*Comment*: In the phrase "criterion standards," *criterion* refers to the content or nature of the performance or knowledge indicated and *standards* refers to the depth or level of competence expected. See CAEL–1, pp. 90–91, CAEL–8, Chapter 2, and CAEL–13, Section II, for discussion and examples of criterion standards.]

**5.3.1** In defining criterion standards, the content or nature of the learning or competence should be stated as clearly as possible through use of appropriate reference and examples.

[*Comment*: Useful ways to clarify the content aspects of criterion standards include reference to particular fields and bodies of knowledge, familiar roles or jobs, particular functions the individual can perform, equipment she can operate, products he is able to produce.]

**5.3.2** In defining standards, several levels of competence should be stated as clearly as possible through use of appropriate reference and examples.

[*Comment*: Ways of clarifying the level or standard expected include use of a reference group, level within that group, activities commonly associated with particular performance levels, whether knowledge is basic or advanced with respect to a specific function, and the type of responsibility normally associated with a particular level of competence. When several levels of competence are so defined, different individuals in different programs or institutions might quite rightly receive credit for different levels of competence depending upon the nature of the program. Thus, a well conceived criterion standard can serve as a common yardstick and means of communication among institutions but still foster educational diversity.]

**5.3.3** Assessment of experiential learning should place emphasis upon criterion referenced assessment so that individuals are evaluated in terms of expected learning outcomes. In addition, it is frequently desirable to incorporate normative judgments, especially insofar as competence is often conceived in reference to ability to compete at a particular level.

**Equitable Standards**

**5.4** All standards for awarding credit should be rigorous and reasonable in relation to the goals and character of the institution and the nature of its students.

**5.4.1** Standards for crediting experiential learning should be the same as or comparable to standards for crediting other more traditional forms of learning. Neither should be more or less difficult to attain.

**5.4.2** In the case of prior learning institutions should consider granting advanced standing or exemption of requirements rather than awarding credit if there is poor definition of what was learned or assessment seems not adequate in all respects.

**5.4.3** In order to be useful and fair, standards should be publicly stated, applied consistently across and within programs, and administered in a manner so that students feel that they are well served.

**Specify Credit Policies**

**5.5** Policies and procedures for granting credit for experiential learning should be clearly specified in written guidelines available to students and faculty.

**5.5.1** The basis for translating learning outcomes into credit hours should be specified.

[*Comment*: Time spent in an activity should not be the primary consideration in determining credit equivalence. There are a variety of approaches more directly connected with learning outcome: credit hour equivalencies can be established for particular accomplishments, learning outcomes can be matched with existing courses, equivalent academic hours required to achieve the learning can be estimated. Formal guidelines are especially desirable in order to insure equity in awards.]

**5.5.2** In recommending credit awards, assessors should take necessary steps to guard against duplication of credit.

**5.5.3** Guidelines should include both rationale and proce-

dure regarding the choice of assessors who award credit for experiential learning.

[*Comment*: In actual practice there are many different arrangements whereby appropriate individuals are chosen to assess and make credit recommendations —individual faculty in departments, special assessors, departmental committees, and so on. See Section IX of this report as well as CAEL–3 and CAEL–9, Chapter 12, for discussion.]

**5.5.4** There should be provision for routine review of credit awards whenever it is felt that a "second opinion" is desirable, and there should be an established procedure, of which students are advised, whereby decisions regarding credit awards can be appealed if there appears to be due cause.

**Learning Contracts**

**5.6** In sponsored experiential learning programs, it is important to clarify criterion standards before the fact so that the student knows what is expected and the learning is guided accordingly. Written learning contracts are a highly desirable means of reaching a clear understanding between student and institution as to learning outcomes required for credit toward degree requirements.

[*Comments*: See CAEL–19 and –20 for discussion of educational contracting and monitoring of contracts.]

**5.6.1** Credit for sponsored experiential learning should be awarded only on the basis of a determination that the student has achieved the learning objectives agreed upon or has achieved alternate learning outcomes clearly satisfactory to student and assessor.

**Useful Feedback**

**5.7** As soon as possible after the assessment, students should receive feedback on the results, and such feedback should include explanations for credit awards that deviate from amounts petitioned or expected.

**5.7.1** All credit awards should be based upon a written evaluation that notes and explains any departure from established assessment policy or procedure.

**5.7.2** In providing feedback to the student concerning assessment and credits awarded, it is important to advise the student regarding implications for degree requirements.

**Useful Integration**

**5.8** Appropriate mechanisms should be developed to assist the student in integrating the results of prior learning assessment or sponsored learning into his or her program of future work.

[*Comment*: Such integration varies widely with type of learning and from institution to institution. Some institutions require a debriefing course after field learning; others require a course in a related academic area. In the case of prior learning, some institutions orient their assessment process toward the development of an appropriate contract for work to complete degree requirements.]

# VI. TRANSCRIBE LEARNING

Since experiential learning often emphasizes application of knowledge and the development of competence rather than mastery of traditional subject matter, usual course labels often do not serve well in describing such learning. Also, prior learning frequently does not correspond with existing courses. On the other hand, the transcript credential is the only means many third parties have for knowing about the learning and how it contributes to a degree. For these reasons, accurate description and recording of learning outcomes is an important and integral part of the assessment process.

**Record Learning Appropriately**

**6.1** Credit or other recognition of learning should be recorded on the student's transcript in a manner appropriate to the learning and to the function of the transcript as an accurate and comprehensive record of the student's learning.

**6.1.1** When learning is highly individualized, entering credit under arbitrary course labels is often not descriptive and may give inaccurate impressions. Some alternative is desirable: narrative descriptions, statement of outcomes, etc.

**6.1.2** Course labels or abbreviated descriptions of learning may be adequate for transcripts when they refer to specific syllabi or detailed competence statements. In such cases, descriptive information necessary for interpretation should be part of the transcript or should be readily available.

**6.1.3** Regardless of the exact form of the credential, it is important that institutions strive to describe through the transcript what the student knows or can do, not simply verify time served.

[*Comment*: See CAEL–20 and –21 for examples of transcript alternatives.]

**Describe Content and Level**

**6.2** There are two essential elements of a good transcript: (a) the content of learning, i.e., what competence or

knowledge was involved, and (b) the level of learning, i.e., what scope or depth was achieved.

[*Comment*: Well-defined criterion standards can serve both ends well if levels of competence are clearly differentiated.]

**6.2.1** When appropriate, transcripts should identify the auspices under which learning is acquired, especially when the conditions of learning and assessment are different from what may be normally assumed by a third party.

[*Comment*: For example, one might differentiate and identify independent study, field experience learning, and prior learning.]

**6.2.2** Transcripts should include additional information as may be necessary to make clear the nature of the learning represented.

[*Comment*: Other information that may be relevant to particular types of learning includes: dates when learning took place so that third parties might better judge whether learning is still current; details such as location, supervision, or duration, which may bear upon quality of learning; an indication of how the learning was documented and assessed and what standards were employed.]

**Communicate with Third Parties**

**6.3** Transcripts should communicate effectively with third parties, especially employers and admission officers considering applications for work or further study.

**6.3.1** Institutions developing narrative transcripts should appoint user review panels to react to the proposed content and format. Appropriate reviewers include students, representatives of public and private employers, and graduate and professional admissions personnel.

**6.3.2** In designing transcripts, it is desirable to balance carefully (a) the need for clear description of the important unique aspects of the individual student's learning, and (b) the necessity to present succinct credentials that are likely to be given adequate attention by third parties.

**Specify Procedures**

**6.4** Institutions should develop guidelines as to the content of transcripts and, where appropriate, the procedure by which the outcome of assessment is drafted and reviewed prior to final recording.

**6.4.1** Information entered on student transcripts, especially regarding content and level of learning acquired, should accurately reflect the procedure and the outcome of the assessment process.

**6.4.2** Students should be informed prior to assessment as to what type of information is normally entered on transcripts.

**6.4.3** Appropriate steps should be taken to respect the right to privacy of individuals directly or indirectly involved in information that appears on any official record.

# PART B
# ADMINISTERING ASSESSMENT ACTIVITIES

# VII. POLICY AND PROCEDURE

Programs that depart significantly from traditional educational activities bear a special responsibility to facilitate a clear understanding of the program. This applies both to philosophy and to implementation. The need is partly to justify and legitimize and partly to help interested parties see how the program works.

**Articulate Rationale**

**7.1** Institutions should articulate a clear rationale for fostering and crediting experiential learning, especially as it may bear upon the nature of the institution's degree or its mission.

[*Comment*: Some institutions may be primarily interested in attracting and serving a new clientele while others may be motivated mainly by a wish to reform the style and outcome of learning. In any event, the nature of the rationale and its implications for students and faculty should be carefully thought through. See CAEL–13, pp. 5–6, for examples of three types of justification: philosophical-educational, institution-oriented, and student-oriented. See CAEL–16 and –26(d) for examples of institutional rationales.]

**Clarify Degree Requirements**

**7.2** Insofar as possible in traditional as well as nontraditional programs, requirements for postsecondary degrees should be stated as reasonably specific types of knowledge, competence, capability, disposition, or other well-defined educational outcomes rather than vague generalities or some specific number of courses or units.

**7.2.1** Faculty should examine systematically what types of experiential learning acquired prior to matriculation or through sponsored learning can contribute most effectively to attainment of the degree requirements.

[*Comment*: See principles 1.1 and 2.1 regarding the development of institutional guidelines as to what is creditable, and see CAEL–9, Chapter 13, and CAEL–12 for further discussion of the problem of what constitutes college-level credit.]

**Review Policy**

**7.3** The definition of institutional policies and procedures concerning assessment and crediting of experiential

learning should involve faculty, students, and others as appropriate and should receive formal review and approval through the regular academic procedures of the institution.

[*Comment*: See CAEL–15 for an account of faculty involvement in policy formation.]

**7.3.1** There should be a designated administrator with clear responsibility for seeing that all institutional policies and guidelines concerning assessment of experiential learning are properly observed.

**Clarify Program Operation**

**7.4** It is important to clarify how experiential learning programs operate in relation to other components of the institution and to insure that policies and procedures are well-integrated with other departments and functions.

[*Comment*: Special programs operate in a larger context of academic relationships and accepted procedure. If a valuable experiential learning program is to prosper and have a favorable effect on the larger institution, it must become an accepted part of the educational context, not alien to it.]

**7.4.1** It is useful to develop an *operational model* that describes how a special experiential learning program operates within the institution.

[*Comment*: A good model should have two characteristics. First, it should facilitate understanding of how a program operates, especially at critical points of policy and decision. Second, the act of developing such a model should reveal how the program needs to be improved—through clarification of policy, revised procedures, added prototype documents, etc. See CAEL–13 for a discussion of operational models and CAEL–16, –17, –18, –20, –21, –24, and –26 for examples.]

**7.4.2** Roles and responsibilities of all persons connected with the assessment process (including students) should be clarified, and a written description of such roles and responsibilities should be provided to all involved.

[*Comment*: See CAEL–17 and –18 for examples of role definitions.]

**Adapt to Students**

**7.5** As necessary, assessment services and degree planning activities should be available at unconventional times and places in order to accommodate needs of students engaged in nontraditional patterns of learning. The quality of such services should be equal to that of services for the student who is on the traditional, daytime track.

**Privacy**

**7.6** There should be established procedures regarding the handling and filing of student portfolios and other materials related to assessment in order to protect privacy of students and others as appropriate.

# VIII. GUIDELINES

Even though an experiential learning program may be small and program practices may be well understood by those involved in it, conscientiously prepared written guidelines are important for several reasons. It is only through written guidelines that public scrutiny can assure proper accountability. Also, written practices provide the necessary reference to insure that policies are interpreted and applied consistently. Finally, written guidelines greatly increase the efficiency of faculty and students who are introduced to the program for the first time.

**Faculty Handbook**

**8.1** It is highly desirable that institutions provide a comprehensive faculty handbook describing policy and practice for all programs involving assessment and crediting of experiential learning.

[*Comment*: It is an expected professional practice that standardized examinations should have a "technical manual" describing their rationale and use and evidence of their soundness. In the assessment of experiential learning, the corollary should properly be an institutional handbook that serves to inform all faculty and others associated with assessment, plus any other interested persons or outside evaluators, as to the policies and procedures of the institution. Desirable components of such a handbook include all documents and descriptions to which these principles refer, but especially program rationale, assessment procedures, standards employed, credit policies, and evidence of quality assurance in assessment.]

**Student Brochure**

**8.2** There should be an appropriate descriptive brochure for students considering participation in an experiential learning program or in assessment of prior learning.

**8.2.1** This descriptive material should contain sufficient information to permit students to make an informed judgment as to whether participation is likely to prove useful, cost-effective, and worth the student's time.

**Student Materials**

**8.3** Students participating in a sponsored program or assessment of prior learning should be provided an integrated set of descriptive materials, forms, and

supporting documents that provide complete information about program procedures and policies.

[*Comment*: A packet of materials for field learning might include, for example, a brief description of the rationale of the program, a standard student handbook such as CAEL–6, special instructions about the local program, a listing of placements, etc.]

**Assessment Sequence**

**8.4** It is desirable to develop a clear sequence of steps to guide students through the assessment process.

[*Comment*: Insofar as possible, it is also desirable to key instructions and documents to this sequence of steps. A flow diagram showing how the student proceeds through steps and decision points may be especially helpful in describing the process. See CAEL–13, –20, and –21 for examples of flow diagrams.]

**Assessment Techniques**

**8.5** It is highly desirable that appropriate instructions and reference materials be readily available to faculty concerning technical procedures for any assessment method that has significant use and is different from routine testing and grading.

# IX. ASSESSORS

In addition to the learner there are often several persons involved in assessment who might rightly be termed assessors. They serve several functions which may or may not be performed by the same individual. These include: (a) mentoring or helping the student define and pursue learning objectives; (b) making judgments about the character and level of learning; and (c) determining the value of learning in credits or other academic currency. For present purposes an assessor is anyone who regularly performs either of the latter two functions on behalf of the institution.

**Assessor vs. Resource Person**

**9.1** Assessors who make regular evaluations of student learning are to be distinguished from other resource persons who may provide information or be consulted regarding assessment, e.g., subject matter experts or prior work supervisors.

**9.1.1** Any responsible person may possibly qualify as an expert or assessment resource person if the individual brings objectivity and appropriate special knowledge to the assessment task.

[*Comment*: There is a variety of evidence that can qualify an individual as an expert: publications or awards, recommendations of other experts, professional position, etc. (See CAEL–8, page 3.)]

**Choice of Assessors**

**9.2** It is very desirable to develop a clear rationale as to what types of assessors are to be used in an experiential learning program.

[*Comment*: Assessors can be subject matter experts, assessment experts, or faculty concerned with generic competences not associated with a particular discipline. They may or may not include individuals outside the institution. Policy regarding choice of assessors should reflect the nature of the program and the types of learning involved.]

**9.2.1** Whenever necessary a team of assessors should be employed in order to obtain the knowledge and expertise that may be required to assess adequately the learning in question.

**Responsibilities and Qualifications**

**9.3** The responsibilities and qualifications of assessors, experts, and other assessment resource persons should be clearly specified.

[*Comment*: See CAEL–8, page 6, and CAEL–9, Chapter 12, for examples.]

**9.3.1** Assessors should be competent not only in the subject matter of their assessment but also in the principles and limitations of the assessment technique employed.

[*Comment*: See CAEL–11 for discussion and references.]

**9.3.2** Assessors and other resource persons should be unbiased and objective, with respect to both personal knowledege of the student and the learning involved.

**Training Requirements**

**9.4** The responsible administrator and principal assessors in the institution should make every effort to be sure that all individuals who are charged with responsibilities connected with assessment have received training appropriate to those responsibilities.

**9.4.1** Important training objectives include understanding the effective use of experiential learning, how to select and adapt assessment methods, how to better define learning objectives and write appropriate evaluations of outcomes, how to enhance accuracy of assessment, and how to interpret standards in awarding credit.

[*Comment*: See CAEL–9, Chapter 12, and CAEL–10, Chapter 6, for discussion of issues and needs concerning development of faculty expertise and awareness.]

**9.4.2** It is very important to give new assessors supervised experience in assessing learning and awarding credit in order to insure that they do not inadvertently set their own judgmental standards too lenient or conservative in relation to institutional guidelines.

[*Comment*: See CAEL–10, page 31, for an illustration of the substantial and consistent errors judges can make if they are not adequately trained in applying proper standards in assessing and awarding credit.]

**Learner as Assessor**

**9.5** Whenever possible, the skill of the learner as assessor should be fostered and improved as a result of the assessment process.

# X. COST OF ASSESSMENT

Financing is a critical aspect of assessing experiential learning, with respect to both cost effectiveness and pricing. The highly individual character of experiential learning often necessitates assessment that is tailored to the specific learning experience. Consequently, some forms of assessment may be technically desirable but prohibitively expensive. Also, pricing assessment and accounting for its cost raises a host of administrative questions that are vital to a program's operation and success. Thus, choice of assessment method must take cost into account, and vice versa.

**Insure Cost Effectiveness**

**10.1** Institutions should insure through careful analysis of direct and indirect costs that procedures for assessing experiential learning are cost-effective with respect to the interests of students, the institution, and broader social considerations.

[*Comment*: See CAEL–9, Chapter 9, for discussion of the general question of cost effectiveness of nontraditional programs. See CAEL–13 for an introduction to economic considerations in examining cost effectiveness and CAEL–18 and –24 for examples of institutional analyses.]

**10.1.1** Care should be taken to allocate costs of assessment and its financing in ways that are equitable to students as consumers and faculty as providers.

**Assessment as Instruction**

**10.2** Analysis of the cost of assessment should take into proper account all instructional functions it serves; a sound assessment procedure should not be sacrificed simply because it appears superficially more expensive than traditional assessment methods.

[*Comment*: The fact that assessment of experiential learning is often closely connected with the instructional process suggests that its cost effectiveness should be evaluated on a different basis from most educational assessment. That is, if assessment of experiential learning is designed to have direct educational benefit, its financing might well be considered to be partly an instructional cost.]

**10.2.1** Remuneration to assessors of prior learning should not be based upon the number of credit hours awarded.

**Value to Consumer**

**10.3** Special assessment procedures should be worth what they cost the student; prices should be equitable in relation to actual cost of assessment and the real benefit of assessment itself. Assessment of prior learning should not be a means of buying credits.

**Cost Efficiency**

**10.4** Institutions should constantly work to improve the management and efficiency of assessment procedures so as to improve cost effectiveness without reducing quality of assessment or its usefulness to individual students.

# XI. QUALITY ASSURANCE

Principles of good assessment practice have three essential features: sound conception, effective execution, and systematic evaluation. The previous ten sections have been largely concerned with the conception and execution of assessment procedures. Quality assurance refers to the third but critical feature. It includes monitoring adherence to good practices, improving effectiveness, and the best procedures for accomplishing both.

**Foster Professional Standards**

**11.1** Standards of professional practice in assessment should be appropriate to the assessment method employed. In the assessment of experiential learning it is especially important to foster a strong sense of collegial quality control as well as routine exercise of administrative responsibility.

[*Comment*: Objective examinations and other standardized assessment instruments should be evaluated on the basis of detailed specifications and empirical evidence regarding the characteristics of the instrument, especially its reliability and validity (see *Standards for Educational and Psychological Tests*, American Psychological Association, 1974). Such specifications and evidence constitute a principal safeguard for insuring quality and minimizing abuse. The corollary safeguard in expert judgment of experiential learning lies in faculty consensus regarding policy, peer review of practices, appropriate authentication, and systematic review of day-by-day program operation.]

**11.1.1** An appropriate official at the institution should have clearly designated responsibility for monitoring the quality of assessment procedures.

**11.1.2** A basic precept of quality assurance is that assessment practices are improved by systematic study of the results of assessment, including especially studies of agreement among faculty on interpretation of assessment policies and consistency in the outcomes of assessment.

[*Comment*: See CAEL–12 for detailed description, discussion, and examples of the types of empirical studies that are desirable in maintaining quality assurance.]

**11.1.3** There should be periodic review of assessment procedures and of information pertaining thereto, preferably involving an objective and informed outsider plus representatives of those who routinely participate in assessment.

[*Comment*: One purpose of such review should be to note any marked discrepancy between the assessment policy or results of assessment and those of other institutions. The occurrence of such discrepancies should be an occasion for examining the rationale of institutional policy and practice. See CAEL–10, Chapter 4, for examples of marked differences in the results of similar assessments at different institutions.]

**Agreement on Practices**

**11.2** It is desirable to determine periodically whether there is reasonable faculty agreement regarding institutional policy as to what learning is college level and what learning is creditable against particular degree objectives.

[*Comment*: Available evidence indicates that substantial faculty disagreement is common (see CAEL–12). Written guidelines, faculty training activities, and routine checks on agreement are normally necessary in order to achieve and maintain satisfactory consensus on such issues.]

**11.2.1** Periodic checks should be made to insure that assessors are adhering to institutional assessment guidelines and procedures.

**Monitor Authenticity**

**11.3** The authenticity of different types of documentation should be checked on a periodic basis.

**11.3.1** Students should be appraised of authentication procedures, and necessary steps should be taken to protect privacy.

**11.3.2** If self-report of learning is accepted, periodic checks of the accuracy of such evidence should be made.

[*Comment:* Evidence indicates, for example, that self-reports of occupational competences are ordinarily quite accurate. Such reports may be subject to careless reporting, however, unless there is a periodic

check to see that they are accurately matched by supervisor's judgment or other evidence that the student has the competence claimed. (See CAEL–7.)]

**Monitor Consistency In Assessment**

**11.4** Institutions should establish routine procedures for periodically examining the consistency of assessment judgments and credit awards.

[*Comment:* When judges subscribe to common principles and guidelines, there is a strong tendency to assume reasonable consistency in judgments from judge to judge and from time to time. Ample evidence indicates, however, that such consistency is often not found. It is essential to verify adequate consistency in order to insure that assessments are fair. The most dependable way to make such a verification is to undertake a special study in which the same assessments are carried out twice through usual procedures (but quite independently) and then compared for consistency through accepted statistical procedures. (See CAEL–12.)]

**11.4.1** Examination of the consistency of assessment results should contribute to judgments as to the adequacy of assessment procedures and the competence of assessors.

[*Comment:* For example, analyses of assessment results should provide answers to such questions as the following: (a) Are any assessors consistently unable to agree reasonably well with other assessors? (b) Do assessment outcomes indicate that reasonably consistent agreement is seldom possible with respect to particular assessment methods or types of learning? (c) Is there any indication that particular assessors or classes of assessors are consistently more or less lenient in applying standards?]

**11.4.2** Particular assessors or methods of assessment should not be used if evidence indicates that assessment is not measuring what is intended or if assessments are frequently unreliable or if some students do not appear to be fairly assessed.

**11.4.3** Analyses of the degree of consistency between two independent sets of assessments should take proper

account of the fact that a high percentage agreement between judges can occur merely because both pass a similar percentage of students.

[*Comment:* Two types of disagreement between assessors should be distinguished. Assessors can disagree on the standard they impose (i.e., what percent pass) or in the choice of which individuals they judge to meet the standard. The latter is normally considered a much more dependable basis for deciding whether assessments are reasonably consistent. See CAEL–12, Chapter 3, for a discussion of this distinction and appropriate modes of analysis.]

**Appropriate Technical Procedures**

**11.5** Standard methods of educational measurement and correlational statistics should be employed in evaluating validity and reliability of procedures for assessing experiential learning.

**11.5.1** Technical procedures employed and samples of faculty and students used to determine validity and reliability of assessment should be described sufficiently to permit judgment as to the representativeness and the stability of the results. Any decisions regarding assessment procedures that are based on such data should be reached in consultation with faculty who have appropriate training in the technical aspects of educational measurement.

**Monitor Value to Students**

**11.6** Periodic checks should be made to determine whether students feel that assessment procedures are sound and equitable and whether the institution is fulfilling satisfactorily commitments made concerning experiential learning programs.

**11.6.1** Special effort should be exerted to determine in what ways the assessment process can be made more beneficial to the student's self-development and self-awareness of personal competence. Whenever possible, it is desirable to evaluate alternate methods of assessment with these objectives in mind.

**Program Evaluation**

**11.7** In addition to ongoing formative evaluation and improvement, experiential learning programs and related assessment procedures should undergo periodic

summative evaluation of overall effectiveness, efficiency, and continuing usefulness in their current form.

[*Comment:* Judgments concerning the quality and effectiveness of nontraditional educational programs and assessment procedures should be made in the context of comparable information concerning traditional programs.]

# APPENDIX: CAEL REPORTS

The 27 publications annotated here represent all the CAEL reports available as of June, 1977. With the exception of CAEL–9, all were published by CAEL, Educational Testing Service, Princeton, New Jersey. Through June 30, 1977, they are available from ETS; following that date, they will be available from the CAEL office in Columbia, Maryland (see inside front cover).

CAEL-1. *Teaching and Assessing Interpersonal Competence—A CAEL Handbook.* Paul Breen, Thomas F. Donlon, Urban Whitaker. 1977. ($6.00)

It is increasingly recognized that interpersonal competence deserves a prominent place in many curricula because of the importance of interpersonal skill in applying theoretical learning in practical situations. This *Handbook* is intended to facilitate the teaching, learning, and assessment of college creditable interpersonal competence acquired in experiential situations. Procedures are suggested for identifying and categorizing interpersonal skills, articulating them to students' goals, discovering and utilizing potential experiential learning situations, and assessing the learning of interpersonal skills for academic credit. A core program of assessment strategies is outlined emphasizing the need for multiple techniques.

CAEL-2. *Learning and Assessing Interpersonal Competence—A CAEL Student Guide.* Paul Breen, Thomas F. Donlon, and Urban Whitaker. 1977. ($3.00)

This *Student Guide* is a companion volume to the *Handbook, Teaching and Assessing Interpersonal Competence* (CAEL-1). It is based on the same theoretical framework and contains some identical sections. The special contributions of the *Student Guide* are chapters on planning for experiential learning and preparing for assessment. Detailed suggestions are offered for preparing a life goals autobiography, articulating personal goals to interpersonal development, and selecting an experiential learning site.

CAEL-3. *Assessing Prior Learning—A CAEL Handbook.* Joan Knapp. 1977. ($6.00)

Different institutions assess and credit prior learning in different ways. One of CAEL's primary objectives is to develop sound general procedures for such assessment and to suggest alternate ways that important basic steps can be carried out. This *Handbook* is a good illustration of that developmental objective. It presents a model for portfolio assessment that incorporates eight stages: (1) facilitating the construction and assessment of a portfolio; (2) identifying significant prior experiences; (3) expressing the learning outcomes of prior experiences; (4) articulating prior outcomes to educational goals; (5) documenting the learning experience; (6) measuring the extent and level of prior learning outcomes; (7) judging the learning outcomes; and (8) evaluating prior learning outcomes for awarding credits or recognition. At each stage alternative practical procedures are suggested.

CAEL-4. *Assessing Prior Learning—A CAEL Student Guide.* Aubrey Forrest. 1977. ($3.00)

It is typically the adult student who petitions for college credit based upon prior experiential learning, and this *Student Guide* is directed to that audience. The purpose is to assist such adults in maximizing the value of their prior learning in relation to educational goals and successfully obtaining appropriate credit. The reader is led step by step through the process of identifying learning outcomes, relating them to educational goals, documenting experience, measuring learning outcomes, and requesting credit or recognition.

CAEL-5. *College-Sponsored Experiential Learning—A CAEL Handbook.* John Duley, Sheila Gordon. 1977. ($6.00)

This *Handbook* is designed for faculty as well as other professionals

concerned with developing effective programs of off-campus experiential learning and assessing the outcomes of those programs. The authors provide theoretical background for nonsponsored off-campus programs, but place the major emphasis upon pragmatic problems of defining educational objectives, developing placements for students, and preparing those students for effective learning experiences. Special emphasis is given to the problem of monitoring experiential learning as it proceeds and integration of that learning following the off-campus experience. The material provided and the steps suggested are articulated with the CAEL *Student Guide, College-Sponsored Experiential Learning* (CAEL–6).

CAEL–6. *College-Sponsored Experiential Learning—A CAEL Student Guide.* Hadley Nesbitt. 1977. ($3.00)

This *Student Guide* is designed to help students make the most of the off-campus experiential learning. It is organized around 11 basic steps. These include: selecting and preparing for the learning experience, involvement in the work situation, integrating the learning derived from the experience into an ongoing academic program. Charts, checklists, and worksheets serve as aids for dealing effectively with each of the 11 steps. This *Guide* is coordinated with CAEL–5.

CAEL–7. *Assessing Occupational Competences—A CAEL Handbook.* Amiel T. Sharon. 1977. ($6.00)

This *Handbook* describes a model for assessing specific competences acquired in work situations that are relevant to occupationally oriented degree programs. The model is designed to help a college specify the kinds of competences acquired in various occupational settings, to define the learning objectives of occupational and career programs, and to translate the competences into college credit where appropriate. The report describes the application of the model to three fields (data processing, law enforcement, and secretarial science) and shows how the model can be applied to other occupations. Prototype assessment instruments and procedures are included.

CAEL–8. *Expert Assessment of Experiential Learning—A CAEL Handbook.* Richard Reilly, Ruth Churchill, Arnold Fletcher, Myrna Miller, Judith Pendergrass, Jane Porter Stutz, John Clark. 1977. ($6.00)

Due to the highly individual character of most experiential learning, assessment usually relies upon the informed judgment of an expert. This *Handbook* provides principles and guidelines for the use of expert judgment. The report deals with a number of basic issues that apply to expert judgment generally; e.g., the role of the expert in defining criteria and structuring the assessment procedure so that it will be as reliable and valid as possible, the importance of establishing standards that are defined as systematically and objectively as possible, and the manner in which common rating errors affect the credibility and the fairness of assessment. These various basic principles and steps of assessment are illustrated and discussed in a series of chapters covering the use of judgment in four areas: interviews, product assessment, performance assessment, and the assessment of written material. These chapters include a number of practical hints and suggestions for the improvement of assessment as well as problems and pitfalls to avoid. Several applications are described in detail.

CAEL-9. *Experiential Learning: Rationale, Characteristics, and Assessment.* Morris T. Keeton and Associates. San Francisco: Jossey-Bass, Inc., 1976. ($12.95)

During its first year the CAEL project commissioned a series of papers concerned with the conceptual foundations and the practice of experiential learning and its assessment. The important series of papers is collected in this book which includes the following chapters:

1. Credentials for the Learning Society (Morris T. Keeton)
2. Deep Traditions of Experiential Learning (Cyril O. Houle)
3. Credentialing the Disenfranchised (Alan P. Gartner)
4. Valid and Invalid Rationales (Melvin Tumin)
5. Differences Between Experiential and Classroom Learning (James S. Coleman)
6. Developmental Change as a Major Outcome (Arthur W. Chickering)
7. Campus and Workplace as Arenas (Sheila C. Gordon)
8. Learning Through Work and Education (Paul E. Barton)
9. Cost-Effectiveness of Programs (George Weathersby and Armand J. Henault, Jr.)
10. Importance of Assessing Learning (Robert Kirkwood)
11. Tools and Methods of Evaluation (Aubrey Forrest, Joan E. Knapp, and Judith Pendergrass)
12. Assessors and Their Qualifications (Urban G. Whitaker)
13. Critical Issues and Basic Requirements for Assessment (Warren W. Willingham)

CAEL-10. *Assessing Experiential Learning.* Warren W. Willingham, John R. Valley, and Morris T. Keeton. 1977. ($6.00)

This final report of the CAEL project provides an overview of the major activities of CAEL's first three years. In separate chapters it includes a brief history of CAEL, a description of the developmental work, selected important outcomes of the field research, and descriptions of the more significant outcomes of the Operational Models Project and the Faculty Development Program. The final chapter attempts to give an overall sense of what the project accomplished and what major conclusions and implications can be drawn from the effort.

CAEL-11. *A Compendium of Assessment Techniques.* Joan Knapp and Amiel T. Sharon. 1975. ($3.50)

There are a wide variety of different assessment techniques that might be appropriate to different types of experiential learning. This monograph includes sections on performance tests, simulations, interviews, ratings, product assessment, etc. Each section orients the reader to one of these general types of assessment and then provides brief illustrations of different applications. This overview cities a number of references that provide more detailed information concerning each assessment method.

CAEL-12. *The CAEL Validation Report.* Warren W. Willingham and Associates. 1976. ($15.00)

*The CAEL Validation Report* provides detailed documentation of the experimental tryout of CAEL developmental products during 1975-76 and a series of 10 field studies involving 24 CAEL institutions. The report describes extensive findings that focus on the strengths and weaknesses of

different assessment methods and the characteristics of assessment procedures that affect reliability, validity, and usefulness to students. It includes chapters on: (a) research and quality assurance, (b) findings concerning the assessment of interpersonal competence, (c) findings concerning the assessment of prior learning, (d) findings concerning assessment of occupational competences, and (e) illustrative institutional studies of the reliability of expert judgment. This report is a basic reference for institutions wishing to examine the consistency and equity of their own assessment procedures and the soundness of their underlying educational rationale.

CAEL-13. *Implementing a Program for Assessing Experiential Learning.* Edited by Warren W. Willingham and Hadley S. Nesbitt. 1976. ($3.50)

This report contains selected material prepared by ETS staff members as background information for the Operational Models project. It gives a general overview of the main issues addressed in the project and provides reference information that can help other institutions work on an operational model. The report includes three papers: "Developing an Operational Model for Assessing Experiential Learning" by Warren W. Willingham and Kurt F. Geisinger; "Setting and Evaluating Criterion Standards" by John Fremer; and "Assessment and Accreditation: Economic Considerations" by Dean T. Jamison and Barbara Burgess Wolfe. A briefly annotated bibliography is includes.

CAEL-14 *Experiential Learning: An Annotated Literature Guide.* Jane Porter Stutz and Joan Knapp. In preparation.

There is a large and diffuse body of literature somehow related to experiential learning, but relatively few, mostly recent, items deal specifically with the theory and practice of assessing experiential learning. This annotated bibliography contains a number of items that CAEL has found particularly helpful in one connection or another through its work over the past three years. They cover a variety of topics, including some important literature with which practitioners in this area are not typically familiar, but most of the references deal specifically with the particular types of problems on which CAEL has placed special emphasis.

CAEL-15. *The Use of Expert Judgment in the Assessment of Demonstrated Learning in the Antioch College Yellow Springs Adult Degree Completion Program.* Robert Lewis. CAEL Institutional Report No. 1 from Antioch College. 1975. ($2.00)

The unique aspect of this report is its detailed recording of the various issues, questions, and problems that arise when a group of faculty relatively inexperienced in assessing experiential learning meet together for intensive discussion with more experienced faculty concerning institutional policies and practices in assessing prior learning. For that reason, the report is a useful reference for any institution wishing to introduce new faculty members to issues concerning assessment and credentials that deserve their attention.

CAEL-16. *Coordinating Educational Assessment Across College Centers.* Ruth Churchill, Andre Guerrero, Janet Hartle, and Harry Horwitz. A CAEL Institutional Report from Antioch College. 1976. ($3.50)

The authors report on an operational model developed as a result of a systematic analysis of three distinctly different Antioch centers. The model

uses four major levels focusing on flow of influence: Level I—the rationale of Antioch College and the individual centers; Level II—programmatic matters bearing on curriculum, faculty, and students; Level III—student assessment based on criterion standards, appraisal of learning, and preparation for assessment; and Level IV—methods of translating experiential learning for nontraditional consumption, outlining credit policies and records of learning outcomes. The report discusses five major findings that have important implications for institutions using experiential learning as a core philosophy.

CAEL–17. *Standard Setting by Students and Community—How Much is Enough?* Laurent Daloz and Clotilde Pitkin. A CAEL Institutional Report from Community College of Vermont. 1976. ($3.50)

This report extends the position that the highest purpose of education is to foster both community and individual self-reliance. It describes the process and materials developed to help students and local review committees agree on standards that are unique to student goals, that accurately reflect community expectations, and that conform to the institution's educational principles. It lists the steps through which student and committee go in the degree development sequence.

CAEL–18. *Implementing and Financing Portfolio Assessment in a Public Institution.* Eugene Kray and Lorraine Hultgren. A CAEL Institutional Report from Delaware County Community College. 1976. ($3.50)

The authors first describe the formation, organization, philosophy, and structure of DCCC's program for assessing prior experiential learning. The heart of the report presents a financial model in which (1) all parties—student, state, and local sponsor—share in the cost of assessment in the same proportions as they do for the traditional programs of the college; (2) faculty are compensated for their time on a contact hour basis according to the number of credits sought by the student—not the number of credits awarded; and (3) the cost of assessment is shown to be approximately one-fourth the cost of traditional course work. This model should be of general interest to both two-year and four-year public colleges.

CAEL–19. *Prospects and Methods for Interpersonal Studies.* Miriam Tatzel. CAEL Institutional Report No. 2 from Empire State College (Revised Edition). 1977. ($2.00)

At Empire State College students work with a mentor to develop learning contracts. This institutional report shows how interpersonal learning is integrated into the formal educative process through the learning contract mode. The author describes a framework that takes into account cognition, affect, and behavior; that is, thought, feeling, and action.

CAEL–20. *Implementing Competency-Based Assessment of Prior Learning.* Nancy Wylie. A CAEL Institutional Report from Florida International University. 1976. ($3.50)

This report describes the development, trial use, and revision of a competence-based tool for assessing prior learning—The Prior Experiential Learning Evaluation Packet. The author explains the integration of the new assessment process within an existing external degree program; describes how the external degree program and its students interact with other administrative and academic units of the University; and discusses *explicit* and *implicit* standards and their implications for assessment in a

context in which the responsibility for assessment is partially decentralized.

CAEL-21. *An Individualized Competence-Based Assessment Model.* Annie Belle Calhoun, James E. Deegan, Leah Harvey, and Charles Libera. A CAEL Institutional Report from Metropolitan State University. 1976. ($3.50)

Metropolitan State University is an upper-division, competence-based, baccalaureate-degree-granting institution created in 1971 to serve adults. This operational model focuses on topics such as criterion standards within the context of an individualized, student-centered, competence-based program; the use of external or community-based persons as expert judges of students' competences; the functions and activities of assessment faculty; the strengths and weaknesses of the narrative transcript; and the effectiveness of the University's assessment policies, procedures, and materials.

CAEL-22. *Documentation and Evaluation of Sponsored Experiential Learning.* Jane Szutu Permaul and Marina Bühler Miko. CAEL Institutional Report No. 3 from University of California at Los Angeles (Revised Edition). 1977. ($2.00)

A major problem in assessing off-campus experiential learning is the need to structure the learning process and document the learning outcomes. This report describes the procedure developed at UCLA that explicates the learning that is taking place and therefore helps to shape and improve subsequent learning experiences of the student. The method focuses upon a record-reflection log and an assessment matrix as tools for assessing sponsored learning. These devices emphasize the role of the student and local supervisors in evaluating and molding learning outcomes.

CAEL-23. *The Refinement and Modification of an Instrument for Assessing the Achievement of Interpersonal Skills of Social Work Students.* Kurt Spitzer and Sue Smock. CAEL Institutional Report No. 4 from Wayne State University. 1975. ($2.00)

Students engage in many types of field experience learning in different types of settings and in different degree programs. This report is especially concerned with field experience related to social work, but the learning checklists involve a number of generic skills that apply to many types of field experience. There are 12 checklists for rating student learning. These fall into three areas: basic educational and performance skills, communication and observation skills, and problem-solving skills.

CAEL-24. *Analyzing Costs in the Assessment of Prior Learning.* R. Lynn Kelley, Terrence J. MacTaggart, and Robert Spencer. A CAEL Institutional Report from Webster College. 1976. ($3.50)

This report describes the preparation for and the results of a cost analysis of the assessment of prior learning in two programs. It concludes that total assessment costs are significantly less than costs for conventional classroom instruction, that unit costs diminish as the volume of assessment increases, and that the evaluation of the relative benefits of assessment programs should be made within the context of long-range institutional objectives. This model will probably be most useful to private institutions that are faced with changing clientele and have the capacity to attract older students.

CAEL-25. *Guidelines and Procedures for the Assessment of Experiential Learning and for the Selection and Training of Field Experts.* Frank Christensen. CAEL Institutional Report No. 5 from William Rainey Harper College. 1975. ($2.00)

Any college wishing to initiate a program of accepting and crediting nonsponsored experiential learning faces first a procedural problem of considering what type of program and procedures might be appropriate. This report discusses the steps through which William Rainey Harper moved in implementing such a program: setting up a local task force, use of consultants, site visits to other institutions, preparation of procedural documents, and so forth.

CAEL-26. *Initiating Experiential Learning Programs: Four Case Studies.* A compilation of four Institutional Reports. The Consortium of the California State University and Colleges, Memphis State University, Union College, and University of Kentucky. 1976. ($5.00)

These four reports all deal with programs that are in some sense in an early stage of development. The report by Barrie Bortnick (Consortium of the California State University and Colleges) (a) describes the efforts of a traditional decentralized system to introduce flexibility in the use of challenge examinations for crediting prior learning. Richard Ranta's report (Memphis State University) (b) describes how a large traditional state university dealt with the issues involved in specifying criteria for assessing experiential learning, acquainting faculty with the assessment process, and integrating those procedures into the university structure. The report by Dale Meyers and Joe Thomas (Union College) (c) describes the development of a central office for sponsored field experience learning in a liberal arts institution. The report by Barbara Hofer, Robert Sexton, and Ernest Yanarella (University of Kentucky) (d) provides a model for integrating experiential learning in the liberal arts, especially with respect to the curriculum's emphasis upon values and ethics.

CAEL-27. *Principles of Good Practice in Assessing Experiential Learning.* Warren W. Willingham. 1977. ($3.00; $2.00 each ten or more)

This report provides a single-source overview of important principles of good assessment practice as represented in the 26 CAEL reports current in 1977. Procedural guidelines are presented in outline form with reference to fuller discussion in other CAEL publications.